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ABSTRACT

Requirements to integrate academic and vocational education in the 1990 Carl D. Perkins Vocational and Applied Technology Education Act are intended to achieve widespread changes and improvements in the field in a short time frame. This resource list supports the efforts of those educators working to enhance vocational education students' learning and thinking skills. It contains descriptions of relevant publications, organizational programs, and clearinghouses. Address/contact and price information is included for each print listing. Nineteen references, three newsletters, two organizations, and nine centers for education/information services are included. (NLA)

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NCRVE

National Center for Research in Vocational Education

University of California, Berkeley

ANNOTATED RESOURCE LIST: INTEGRATION OF ACADEMIC AND VOCATIONAL EDUCATION

Compiled by

Technical Assistance for Special Populations Program (TASPP)

University of Illinois

National Center for Research in Vocational Education
University of California at Berkeley
1995 University Avenue, Suite 375
Berkeley, CA 94704

Supported by
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U.S. Department of Education

August, 1992 MDS-442

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INTRODUCTION

Requirements to integrate academic and vocational education in the 1990 Carl D. Perkins Vocational and Applied Technology Education Act are intended to achieve widespread changes and improvements in the field in a short time frame. This resource listing is intended to support the efforts of those educators across the country who are working to enhance the learning and thinking skills of all students through vocational education. It contains descriptions of relevant publications, organizations, programs, and clearinghouses. Contact and price information is included for each listing. New resources related to integrating academic and vocational education will be included in future updates of this list.

If you have any questions about this list, or need resources on other topics of concern to special populations in vocational education, please contact the TASPP staff.

A service program of the National Center for Research in Vocational Education at the University of California, Berkeley, TASPP works nationally to increase vocational program accessibility, quality, and availability for youth and adults from special populations. Additional information on TASPP services, activities, and publications is available by calling or writing TASPP, University of Illinois, 345 Education Building, 1310 South Sixth Street, Champaign, Illinois 61820, (217) 333-0807.

REFERENCES

APPLIED ACADEMIC CURRICULA: A MODEL FOR INTEGRATING ACADEMIC AND VOCATIONAL EDUCATION. PRELIMINARY FINDINGS. (PAPER PRESENTED AT THE AERA ANNUAL MEETING, BOSTON, MA)

Pepple, J. D., Law, D. A., & Valdes, C. M. (1990, April).
Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

This paper presents the preliminary findings of a project designed to develop effective procedures and instruments to assess student and instructional program outcomes resulting from the implementation of applied academic curricula. Project staff surveyed sites currently implementing the Applied Communication and Applied Mathematics curricula published by the Agency for Instructional Technology and the Center for Occupational Research and Development. Discussion of findings focused on: (1) significant differences in the academic achievement of students when taught from the applied academic packages as compared to traditional instructional approaches; (2) teachers' selection and use of applied academic packages in their courses; (3) staff perceptions of the advantages and disadvantages of the applied academic packages as compared to traditional curricula materials; (4) students' perceptions of the advantages and disadvantages of the applied academic packages as compared to traditional materials; (5) types of programs where teachers implement applied academic curricula packages; (6) outcomes that teachers, administrators, and other personnel expect to observe when the applied academic curricula packages are implemented in different programs; (7) ways applied academic curriculum materials are used to meet a school's graduation requirements in communications, mathematics, or science; and (8) findings and conclusions from identified research studies which have been conducted on Principles of Technology curriculum materials. Numerous references and a copy of the assessment instrument are included. ztb (43 pages)

ADDRESS:
National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(800) 637-7652

THE CASE FOR INTEGRATING ACADEMIC AND VOCATIONAL EDUCATION

Adelman, N. E. (1989, February).
Washington, DC: Policy Studies Associates, Inc.

Commissioned by the National Assessment of Vocational Education, the principal purpose of this study was to identify, describe, and assess the potential of innovative approaches to integrating vocational and academic education as one way of helping students to understand the importance of academic learning. The report describes local educational settings where unusual efforts are being made to integrate or align vocational and academic curricula. Among the primary findings were the following: (1) curriculum development and professional development are the key activities associated with implementing an integrated vocational/academic curriculum, (2) it is preferable to have both academic and vocational instructors involved in the innovation from the start, and (3) funding is needed to support professional and curriculum development activities. Five detailed case studies are included. mcw (184 pages)

ADDRESS:
Policy Studies Associates, Inc.
1718 Connecticut Avenue, N.W.
Suite 400
Washington, DC 20009
(202) 939-9780

THE CUNNING HAND, THE CULTURED MIND: MODELS FOR INTEGRATING VOCATIONAL AND ACADEMIC EDUCATION (MDS-141) (ERIC DOCUMENT REPRODUCTION SERVICE NO. ED 334 421)

Grubb, W. N., Davis, G., Lum, J., Plihal, J., & Morgaine, C. (1991, July).
Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

Eight models of academic-vocational education integration, based upon extensive site visits and observation, are identified and analyzed in this report. The models differ widely in their approaches and in their degree of ambition and include the following: (1) incorporating academic competencies into vocational courses; (2) collaboration among academic and vocational teachers to incorporate academic competencies into vocational courses; (3) modifying the academic curriculum so that it is more vocationally relevant; (4) modifying and coordinating both academic and vocational courses; (5) senior projects, which replace electives with a project; (6) the Academy model, in which academic teachers team with a vocational instructor in a vocational subject area; (7) occupational high schools and magnet schools; and (8) occupational clusters, career paths, and majors that cut across departmental lines, creating a matrix structure. The document addresses the purposes and importance of integration in the framework of educational reform, clarifies the requirements for successful integration efforts, outlines resources, and addresses the need for sustained consistent reform efforts. The appendixes include a list of the school visits and interviews and curriculum materials related to the integration of vocational and academic education. jeb (112 pages, $4.50)

ADDRESS:
National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(800) 637-7652

GRANTING ACADEMIC CREDIT FOR VOCATIONAL EDUCATION
White, B. (1988, December).
Honolulu, HI: State Board for Vocational Education, Office of the State Director for Vocational Education.

This document offers suggestions to decision makers in Hawaii's public education system who are trying to find strategies to achieve excellence in secondary education. One strategy suggested is the equivalent credit policy. Equivalency credit (or cross credit) is the granting of full or partial graduation credit for a specific subject area to an elective area course. Described in the publication are state procedures on equivalent credit for the states of Illinois, New York, Ohio, and Oregon, and the Principles of Technology effort involving 40 states. Also discussed are the steps in developing an equivalent credit plan and related issues concerning equivalent credit. ztb (21 pages)

ADDRESS:
State Board for Vocational Education
Office of the State Director for Vocational Education
University of Hawaii
1633 Bachman Place
Honolulu, HI 96822

IDENTIFYING AND DESCRIBING THE SKILLS REQUIRED BY WORK
Kane, M., Berryman, S., Goslin, D., & Meltzer, A. (1990, September).
Washington, DC: U.S. Department of Labor.

Prepared for the Secretary's Commission on Achieving Necessary Skills, this report suggests skills necessary for effective work performance. The authors recommend to the Commission the skills required for workforce readiness and propose a language to communicate these skills to both the corporate and the educational communities.

Presented to the Commission are the "necessary" skills--functional and enabling--and a vehicle for introducing them--workplace scenarios. The 27 functional skills are grouped into five classes of activity. These include: (1) resource management, (2) information management, (3) social interaction, (4) understanding of systems behavior and performance, and (5) human and technology interaction. A discussion of the Commission's approach and other background information relevant to the inquiry is included as well as suggested steps which the Commission may take in communicating these skills to the public. The appendix includes four workplace scenarios depicting different occupations. ztb (36 pages)

ADDRESS:
Pelavin Associates, Inc.
2030 M Street, N.W., Suite 800
Washington, DC 20036

IMPROVING OUTCOMES FOR STUDENTS WITH SPECIAL NEEDS: INTEGRATING ACADEMIC AND VOCATIONAL EDUCATION (TASPP BRIEF, 2[1]). (ERIC DOCUMENT REPRODUCTION SERVICE NO. ED 323 339)
Coyle-Williams, M. A. (1990, July).
Champaign: The University of Illinois, National Center for Research in Vocational Education, Technical Assistance for Special Populations Program.

Issues which are critical to improving the academic and economic competitiveness of youth at risk are highlighted in this Brief. The potential of an integrated vocational and academic curriculum in achieving these ends is considered. mcw (4 pages, no charge)

ADDRESS:
National Center for Research in Vocational Education
Technical Assistance for Special Populations Program
University of Illinois
345 Education Building
1310 S. Sixth Street
Champaign, IL 61820
(217) 333-0807

INTEGRATING ACADEMIC AND VOCATIONAL EDUCATION: ISSUES IN IMPLEMENTING THE CARL PERKINS AMENDMENTS OF 1990 (PAPER PRESENTED AT THE 1990 CONFERENCE OF THE NATIONAL ASSOCIATION OF STATE DIRECTORS OF VOCATIONAL EDUCATION) WORKING PAPERS SERIES, MDS-234). (ERIC DOCUMENT REPRODUCTION SERVICE NO. ED 328 763)
Grubb, W. N. (1991, January).
Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

Based on research sponsored by the National Center for Research in Vocational Education, University of California, Berkeley, this paper outlines several issues concerning integrating academic and vocational education that federal and state policymakers face in implementing the Carl Perkins Amendments of 1990. The issues discussed include academic and vocational education integration, prioritizing assistance to programs serving the highest concentrations of special populations, area vocational schools, and local applications. Each issue is presented with a brief comment outlining several alternatives. mcw (4 pages, $2.00)

ADDRESS:
National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(800) 637-7652

INTEGRATING ACADEMIC AND VOCATIONAL SKILLS INSTRUCTION
Pennsylvania Council on Vocational Education, & Pennsylvania Department of Education, Bureau of Vocational and Adult Education (1991).
Camp Hill, PA: VAP Foundation.

This four-hour videotape is designed for personnel involved with implementing the integration requirements of the 1990 Perkins Act. It features the January 1991 two-day symposium on "Integrating Academic and Vocational Skills Instruction." The symposium featured nationally known speakers who addressed the "why" and "how" of integration.

The videotape includes the following presentations: "The Impact of Economic Change on Employees' Skill Needs," "Congressional Intent in the Perkins Vocational Education Act," "Ohio's Experience in Integrating Academic and Vocational Education," "One Model of Integration: Principles of Applied Engineering." The two-tape set is ideal for teacher, administrator, board and advisory committee inservice and preservice use. sck ($95.00, plus $9.50 postage and handling for each set)

ADDRESS:
VAP Foundation
23 Meadow Drive
Camp Hill, PA 17011-8331
(717) 761-3381

INTEGRATING ACADEMIC AND VOCATIONAL STUDIES (MDS-108)
National Center for Research in Vocational Education. (1989).
Berkeley, CA: Author.

This two-hour videotape is of a teleconference which was broadcast in November of 1989. Jack Jennings, Counsel for Education, U.S. House Committee on Education and Labor, and David Evans, Staff Director, U.S. Senate Subcommittee on Education, Arts, and Humanities, presented the congressional perspective on why the integration concept was significant. Jeannie Oakes, RAND Corporation, talked about research evidence bearing on academic/vocational integration and, following her presentation, a panel of four educators explored ways that integration has been implemented. sck (1/2" VHS Format, $15.00)

ADDRESS:
National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(800) 637-7652

INTEGRATING ACADEMIC SKILLS IN VOCATIONAL PROGRAMS. THE JOURNAL FOR VOCATIONAL SPECIAL NEEDS EDUCATION, 13(1)

Schloss, P. J. (Ed.). (1990, Fall).

Articles in this issue focus on the integration of basic academic skills into the vocational curricula. Four articles are devoted to the integration of basic academic skills, math skills, communication skills, and science skills into vocational education programs. A project, located at the University of North Texas, which uses a team approach to writing a curriculum that would integrate academic subjects into vocational curricula is described. The method encourages cooperation between teachers and directs student attention to the interrelationship of their coursework.

The development, training, and coordination practices for teams who will design accommodation strategies that integrate the teaching of academic and vocational curricula in postsecondary vocational education programs is discussed. In addition, eight widely differing models for integrating academic and vocational programs are presented. ztb (Single issue $6.50)

ADDRESS:
The Journal for Vocational Special Needs Education
c/o Gary Meers
University of Nebraska
518 E. Nebraska Hall
Lincoln, NE 68588-0515

INTEGRATING BASIC SKILLS WITH VOCATIONAL EDUCATION. VOCATIONAL EDUCATION JOURNAL, 63(2)

Bashkin, G. (Ed.). (1988, March).

The integration of basic academic skills into a vocational curriculum is the focus of this issue. Issues culminating in the demand for "the basics" are discussed. Promising developments to improve preparation in two kinds of basic skills--"common core" and "job-specific" are highlighted. Also included are four articles about schools that are pioneering different approaches to the integration of basic skills. Two articles focus on reading skills. mcw ($3.00)

ADDRESS:
Vocational Education Journal
American Vocational Association
1410 King Street
Alexandria, VA 22314
(703) 683-3111 in VA
(800) 826-9972

INTEGRATION OF ACADEMIC AND VOCATIONAL-TECHNICAL EDUCATION: AN ADMINISTRATOR'S GUIDE

Norton, R. E., Harrington, L. G., Fitch, C. C., & Kopp, K. (1987).
Athens, GA: American Association for Vocational Instructional Materials.

Designed as a tool for planning effective integrated programs, this guide emphasizes the need to integrate academic and vocational-technical education. The following aspects of integration are discussed: (1) selecting and using appropriate strategies, (2) laying the foundation for and conceptualizing the nature and parameters of the intended change, (3) preparing to implement the integration process (the change process), (4) evaluating the integration program, and (5) maintaining an on-going program evaluation and improvement process. Selected models are described for integrating academic, math, science, artistic, and practical skills that have been successful in Arkansas, Massachusetts, Kentucky, Pennsylvania, Ohio, Oregon, and Germany. Each of these descriptions includes a program title, description, and address from which to obtain additional information. jeb (112 pages, $14.00)

ADDRESS:
American Association for Vocational Instructional Materials
745 Gaines School Road
Athens, GA 30605
(800) 228-4689

NEW DEVELOPMENTS IN IMPROVING THE INTEGRATION OF ACADEMIC AND VOCATIONAL EDUCATION

Owens, T., & McClure, L. (1989, August).
Portland, OR: Northwest Regional Educational Laboratory.

This paper focuses on the need for integration of academic and vocational education. A conceptual framework to assist in identifying the factors that influence cooperation between academic and vocational teachers and the student and teacher benefits resulting from it is discussed. Effective practices in applied curricula for secondary vocational education students are overviewed. Preliminary outcomes from The National Center for Research in Vocational Education's evaluation of efforts to integrate academic and vocational education are highlighted. Finally, recommendations to further the integration of academics and vocational education at the district, state, regional, and national levels and in teacher education are stated. References are included. mcw (25 pages, $5.25)

ADDRESS:
Northwest Regional Educational Laboratory
101 S.W. Main Street
Suite 500
Portland, OR 97204
(503) 275-9500

PROCEEDINGS FOR FORUM ON INTEGRATING OCCUPATIONAL AND ACADEMIC EDUCATION (MDS-118)

National Center for Research in Vocational Education. (1989, November).
Berkeley, CA: Author.

These proceedings feature papers from a number of individuals who have spearheaded exemplary programs that integrate occupational and academic education. The premise of this forum is focused on strengthening the academic basics of the "forgotten half," the half of all students who do not attend college. Six papers are presented representing the following institutions: the Northwest Regional Educational Laboratory, University of Minnesota, West Virginia Vocational Education, Florida Department of Education, Pittsburgh Public Schools, and the University of Illinois at Urbana-Champaign. sck (27 pages, $2.50)

ADDRESS:
National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(800) 637-7652

THE REBIRTH OF VOCATIONAL EDUCATION (SPECIAL ISSUE). PHI DELTA KAPPAN, 71(6)

Gough, P. (Ed.). (1991, February).

This special issue includes important discussions, in-depth analyses, and suggested strategies for resolving issues related to vocational education. Written by experts in their fields, the articles discuss critical issues in vocational education including: (a) major changes in the Perkins Act and their implications, (b) restructuring vocational education, (c) why vocational education is in trouble and how to reform it, (d) why and how vocational education can meet the need for skilled labor, (e) strategies for bringing education and work closer, (f) the integrated curriculum and its benefits, and (g) the value of developing practical skills. ztb ($30.00/year, $3.50 single copy)

ADDRESS:
Phi Delta Kappa, Inc.
Eighth & Union
P.O. Box 789
Bloomington, IN 47402
(812) 339-1156

TEACHING AND LEARNING GENERIC SKILLS FOR THE WORKPLACE (MDS-066). (ERIC DOCUMENT REPRODUCTION SERVICE NO. ED 329 682)

Stasz, C., McArthur, D., Lewis, M., & Ramsey, K. (1990, December). Berkeley, CA: National Center for Research in Vocational Education, University of California, Berkeley.

This report presents the findings of an exploratory study on the teaching and learning of generic employability skills in several vocational classrooms. These skills include: (1) group cooperation, communication, and problem-solving; (2) identifying and defining problems in complex environments; (3) acquiring and synthesizing information; and (4) adapting to changes and gaps in information. The report provides a conceptual framework for defining these skills and analyzing these skills from the perspectives of this framework and research on learning and teaching. The study sought answers to three questions: (1) What generic skills are being taught? (2) How are they taught? and (3) How does the instructional context affect instruction? Findings have implications for future research on generic skills, for educating diverse populations, and for integration of vocational and academic education. jb (69 pages, $4.50)

ADDRESS:
National Center for Research in Vocational Education
Materials Distribution Service
Western Illinois University
46 Horrabin Hall
Macomb, IL 61455
(800) 637-7652

TRAC MANUAL

TRAC Staff. (1990).
Fishersville, VA: Woodrow Wilson Rehabilitation Center.

The Trade-Related Academic Competencies (TRAC) manual contains competencies for 26 occupational areas and a generic list of academic skills required in most trade areas. Task lists are designed to identify basic academics required in specific occupational areas and are helpful in planning an individualized vocational component for each student. Task lists are available for generic skills and the following areas: accounting, general building maintenance, agriculture production, general secretarial, auto body repair, geriatric nursing, auto mechanics, health assistant, building maintenance and repair, hospital housekeeping, building trades cluster, horticulture, carpentry, hotel/motel specialist, child care worker, masonry, commercial food service, printing, cosmetology, small engine repair, drafting, tractor mechanics, electricity, welding, electronics technician, and word processing. sck (no charge)

ADDRESS:
Trade-Related Academic Competencies (TRAC)
Woodrow Wilson Rehabilitation Center
Fishersville, VA 22939
(800) 345-WWRC, Ext. 27305

WHAT WORK REQUIRES OF SCHOOLS: A SCANS REPORT FOR AMERICA 2000

Secretary's Commission on Achieving Necessary Skills. (1991, June). Washington, DC: U.S. Department of Labor.

The first product of the Secretary's Commission on Achieving Necessary Skills (SCANS), this report defines the skills needed for employment and contains proposals for acceptable levels of proficiency. Fundamental changes in the nature of work and the implications those changes hold for the kinds of workers and workplaces the nation must create are described. Five competencies and a three-part foundation of skills and personal qualities that define effective job performance today are identified. mcw (31 pages, no charge)

ADDRESS:
U.S. Department of Labor
Secretary's Commission on Achieving Necessary Skills
200 Constitution Avenue, N.W.
Washington, DC 20210
(800) 788-SKILL

WOODLAND HIGH SCHOOL CAREER INFUSION ACTIVITIES
Woodland High School. (Comp.). (1991).
Rohnert Park: California Institute on Human Services, Vocational Education Resource System.

This document is a compendium of lesson plans for integrating career path activities into vocational and core academic courses including art, business, English, foreign languages, home economics, industrial technology, math, physical education, science, social science, and special education. These lesson plans were implemented at Woodland High School, a model site for California's Educational Excellence Through Career-Vocational Education Project. sck (300 pages, $24.50)

ADDRESS:
California Institute on Human Services
Vocational Education Resource System
Sonoma State University
1801 E. Cotati Avenue
Rohnert Park, CA 94928
(707) 664-2416

NEWSLETTERS

CHANGE AGENT

Articles in this newsletter highlight current best practices, applied research, and resources on topics such as integrating academic and vocational education, tech-prep, serving learners with special needs, accountability, performance standards, and administration and teacher preparation. This newsletter would be of interest to practitioners, administrators, researchers, and policymakers concerned with issues in vocational education. sck ($35.00)

CONTACT:
Ann Wilkinson Connor
National Center for Research in Vocational Education
1995 University Avenue, Suite 375
Drawer CH
Berkeley, CA 94704-1058
(800) 762-4093

NORTHWEST CONNECTIONS: EXCHANGING IDEAS ON APPLIED ACADEMICS

This newsletter, formerly known as Applied Academics Exchange, is a publication of the Education and Work Program of the Northwest Regional Educational Laboratory (NWREL). Published on an occasional basis, it provides an opportunity for schools and colleges in Alaska, Idaho, Montana, Oregon, and Washington to exchange ideas on applied academics and other approaches to integration of academic and vocational instruction. Articulation activities between institutions such as tech prep and 2+2 models, the latest resources, and a calendar of events for training opportunities and workshops are featured in each issue. sck (available free of charge to educators in the NWREL region)

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Larry McClure, Editor
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Portland, OR 97204
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(800) 547-6339 (Ext. 597)

NORTHWEST REPORT

This newsletter serves as the Northwest Regional Educational Laboratory's vehicle for disseminating information on topical issues, research, resources, and effective programs. Each issue offers in-depth discussions on specific populations; topics or issues, such as Native Americans Education, Pacific Education, rural and urban education, at-risk youth, applied academics, and policy making; in addition to information on current researches, resources, conferences, and meetings. ztb (no charge)

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ORGANIZATIONS

AGENCY FOR INSTRUCTIONAL TECHNOLOGY (AIT)

The Agency for Instructional Technology is a nonprofit U.S.-Canadian organization established in 1973 to strengthen education through technology. AIT provides leadership and service to the education community through cooperative development, acquisition, and distribution of technology-based instructional materials.

The instructional materials made available through AIT are either developed and financed through joint program projects organized and managed by AIT, or acquired from state and local education agencies.

A variety of video and software materials for vocational, occupational, and career programs are available from this organization. In addition, curriculum materials which integrate academic and vocational instruction with physics, math, and communication are also available.

AIT's free, quarterly newsletter provides up-to-date information about videos and activities. mcw

CONTACT:
Agency for Instructional Technology
Box A
Bloomington, IN 47402-0120
(812) 339-2203
(800) 457-4509

CENTER FOR OCCUPATIONAL RESEARCH AND DEVELOPMENT (CORD)

A variety of products and services are available from the Center for Occupational Research and Development, a nonprofit public-service organization dedicated to the advancement of vocational and technical education. Spanning secondary, postsecondary, and adult training and education, CORD provides services, forecasts, strategies, curricula, and materials that are used to promote a more productive and competitive workforce.

CORD's goal is to assist educational institutions and other organizations who provide education, training, and retraining for America's technical workers. In recent years, CORD has become involved in designing curricula using applied academic instructional materials. These materials are being implemented in secondary, postsecondary, and adult retraining programs. CORD has worked with schools to develop 2 + 1 and 2 + 2 curricula in which the last two years of secondary school are linked to one or two years of postsecondary school. CORD also helps postsecondary schools devise articulation strategies in which the institution grants credit for the work done at the secondary level as part of a two-year or four-year program. mcw

CONTACT:
Center for Occupational Research and Development
601 C Lake Air Drive
Waco, TX 76710
(817) 772-8756
(512) 323-0779 Austin, TX office
(800) 231-3015

CENTERS FOR EDUCATION/INFORMATION SERVICES

CENTER FOR APPLIED ACADEMICS

Primarily serving the Northwest region, the Center for Applied Academics provides technical assistance on the subject of applied academics. Its goals are to network with states and programs in the Northwest to identify and overcome barriers to implementing applied academics in K-12 and postsecondary settings; build technical assistance capability in states; share training and ideas for teachers, administrators, business leaders, and teacher educators; encourage businesses to establish partnerships to support applied academics; and conduct research, evaluation, and policy studies to support the development of applied academics in both rural and urban areas of the region. It also provides telephone support, conference and workshop presentations, an annual survey, and publications that address this issue. The Center publishes a quarterly newsletter. jeb

CONTACT:
Center for Applied Academics
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101 S.W. Main Street, Suite 500
Portland, OR 97204
(503) 275-9597
(800) 547-6339 (Ext. 597)

EDUCATIONAL EXCELLENCE THROUGH CAREER-VOCATIONAL EDUCATION

Disadvantaged youth comprise the highest proportion of California high school dropouts. Integrating academic and vocational education is a promising technique for addressing the reading, math, and communications deficits that affect the academic success of this group. This technique also fosters closer working relationships among teachers. The Educational Excellence Through Career-Vocational Education Project, active at eight high school sites, has integrated academic and vocational subject matter while also instituting business and industry partnerships, providing employability skills development training, and extending support services.

The project facilitated unique approaches to improving schools and the programs and services available to all students. Those schools incorporating more of the 42 project objectives saw the most dramatic results. Dropout rates decreased by 5% at a comprehensive school and by 9.7% at a vocational magnet school. One comprehensive school that instituted Accelerated Learning for high-risk students saw referrals to continuation schools drop from 200 per year to 20, and out of 500 students enrolled in the new program, only seven dropped out. Another school observed that attendance rates increased by 1.8%, teen pregnancies decreased by 50%, and suspension days decreased by 84%. jeb

CONTACT:
Educational Excellence Through Career-Vocational Education
Wendy Erno, Coordinator
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260 Russell Boulevard
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(916) 756-1081

LIFELONG OPTIONS PROGRAM

Lifelong Options is a comprehensive program designed primarily for students in grades 11 and 12 that maximizes students' chances of success in school and beyond. Six components comprise the program: (1) applied academic instruction offered in small classes, with accelerated instruction in reading, writing, and math through computer-assisted programs and tutoring; (2) innovative occupational instruction options allowing students to acquire skills in an occupational interest area in a community-based education program, a school-based business, or an on-the-job training program; (3) intensive counseling to provide personal and career guidance, both one-on-one and in group settings; (4) employability instruction delivered through teacher-student interactions and computer-assisted programs, as well as through school-community-business partnerships; (5) life-coping skill instruction to help students develop abilities in decision making, communication, conflict resolution, and goal setting; and (6) physical education and recreational team activities to enhance self-esteem and appreciation of leisure activities.

The program has been successfully implemented in a suburban career center, a rural alternative school, and an urban school-within-a-school. It uses a cost-effective, nationally-validated, self-report instrument that identifies students who are truly at risk of not gaining the academic and occupational skills necessary to contribute to the global economy. Staff development is provided in student identification, affective behavior, learning styles, stress management, and program evaluation. jeb

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Lifelong Options Program
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NATIONAL DIFFUSION NETWORK (NDN)

The National Diffusion Network sponsors over 100 exemplary programs that can be used to achieve the National Goals for Education issued by the President and the Nation's governors in February 1990. Administered by the U.S. Department of Education, NDN provides funds to disseminate information about exemplary programs to schools, colleges, and other institutions throughout the country. These programs and their sponsoring schools and organizations, the NDN State Facilitators, and the Private School Facilitator form a resource network that helps other schools adopt programs for their own use to improve the education of their students. NDN programs have been field-tested with students and are proven effective. Every program has been evaluated locally and approved by a panel of the U.S. Department of Education. Types of projects include Developer Demonstrator Projects, developed by local schools; Dissemination Process Projects, large scale programs run by national organizations; and State Facilitator Projects, which serve as in-state links between NDN programs and local schools interested in implementing the programs. Subjects covered include communication, programs for people who are disabled, educational reform, career and vocational education, and dropout prevention programs. jeb

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National Diffusion Network
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U.S. Department of Education
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Washington, DC 20208-5645
(202) 219-2134

NATIONAL TECH PREP CLEARINGHOUSE OF RESOURCES

Committed to sharing information, curriculum, and resources to assist in implementing Tech Prep programs defined in P.L. 101-392, the Carl D. Perkins Vocational Education and Applied Technology Act, the National Tech Prep Clearinghouse of Resources provides promotional samples, orientation videotapes, state definitions and guidelines, curricular planning models, speeches and presentations, articulation agreements, and academic integration curriculum. The Clearinghouse maintains state and local contacts and speaker referrals. It is coordinated with the National Center for Research in Vocational Education, University of California, Berkeley; Center for Occupational Research and Development; Tech Prep Consortium; and U.S. Department of Labor. jeb

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National Tech Prep Clearinghouse
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PLANNING AND INTEGRATING BASIC ACADEMIC SKILLS INTO VOCATIONAL TEACHER AND COUNSELOR EDUCATION CURRICULA

The goal of this federally-funded project is to develop, field-test, and disseminate two sets of pre-service curricula to assist educators and counselors in integrating basic academic skills into vocational education. One set of materials will be designed for use by vocational teacher educators, the other will be for vocational counselor educators.

A four-step development process will be used. First, two Working Groups (teams of national experts) will assist project staff in all phases of materials development. The second step will involve the development of two reviews of theoretical and empirical literature--one in vocational teacher education and one in vocational counselor education. The third step will be a series of eighteen on-site reviews. Each will undergo a nomination and assessment process to ensure that basic academic skills are being integrated into the pre-service curriculum. Finally, a comprehensive analysis of the literature review and on-site research data will be used to develop draft sets of pre-service curricula. These will be competency-based and organized for individualized instruction with adults and at-risk groups, as well as with mainstream vocational and counselor education students.

To field-test the draft curricula, an additional eighteen sites will be selected. The final stage of this project will be nationwide dissemination of these curricula through publications and conference presentations. jeb

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SKILLS AND ACADEMICS GRANT EDUCATION (SAGE)

A joint venture between the Metro Area Vocational-Technical School District and Oklahoma City Schools, since 1981 SAGE has served as an alternative high school for students classified as at-risk of not graduating from high school. In 1990, this cooperative effort was awarded the Governor's Excellence Award. The Program is designed to integrate general education and vocational training to assist students in recognizing the relationship between academics and the world of work.

This unique school offers both vocational and academic programs. The seven vocational programs are: (1) Auto Service Technology, (2) Business Technology, (3) Building Maintenance, (4) Carpentry, (5) Distributive Education/Marketing, (6) Motorcycle Technology, and (7) Welding. Academic programs offered include Mathematics, Language Arts, Science, and Social Studies. In addition, a Learning Resource Center is available for remedial support in reading and math. All classes use individualized instructional methods with maximum student-to-teacher ratios of fourteen to one. Students are referred to SAVE from the seven Oklahoma City district high schools. Support services available include a non-traditional career counseling. jeb

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SOUTHERN REGIONAL EDUCATION BOARD-STATE VOCATIONAL EDUCATION CONSORTIUM

The guiding principle of the Consortium is improving the education of students enrolled in high school vocational programs in the Southern Regional Education Board (SREB) states. The Consortium (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Virginia, and West Virginia) develops, applies, evaluates, and promotes approaches to strengthen students' basic competencies in communications, mathematics, and science, and their critical thinking and problem-solving skills. Today over three dozen pilot sites in these 14 states, working with state vocational, governmental, and business leaders, are committed to this goal. SREB's recommendations for developing high school vocational education programs are to: design a coherent and challenging program of vocational and academic courses that will teach students in a vocational education program essential content from college preparatory courses in mathematics, science, and the language arts through an applied process; and revise vocational education programs to place a high priority on developing basic academic skills that can help produce high school graduates with the necessary skills for further learning on the job or in formal educational programs.

Directly related to the Consortium's work is a dropout prevention project funded by the U.S. Department of Education. SREB is working with pilot site junior high schools and high schools in six states–Arkansas, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee. These states are evaluating the effectiveness of various combinations of vocational and academic instruction aimed both at improving the basic competencies in mathematics, sciences, and communications of potential dropouts and at creating a school environment successful in keeping these students in school.

A variety of publications are available related to Consortium and other SREB initiatives. mcw

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STATEWIDE WORKSHOP ON STRENGTHENING SECONDARY (6-12) PROGRAMS–CHALLENGE 2000: FOCUS ON STUDENT PERFORMANCE

Designed by the Virginia Department of Education, Challenge 2000 is a three-year initiative focusing on integrating academic and vocational skills in the secondary program. The goal is to assist school divisions developing a plan for implementing an interdisciplinary-team approach to improve the delivery of career guidance, counseling, and instruction to students in grades 6-12 that will motivate students to higher achievement levels and promote appropriate career decisions.

Each school division involved in the process sent a six- to eight-member team, which included a guidance counselor, principal, academic teacher, vocational teacher, division superintendent, director of vocational education, key instructional leader, or guidance supervisor. Upon submitting an appropriate plan and budget for activities, school divisions were given a mini grant of $2,000 for planning and implementation activities. Three workshops were held with assistance given to 100 school divisions on the implementation and development of a plan to integrate academic and vocational skills. Integration strategies used in Virginia pilot sites and in sites at other southern states served as a basis for the workshop. The workshop sessions focused on such strategies as developing programs of study, counseling students, setting higher expectations for students in academic and vocational courses, offering applied academic courses, assessing students' needs, and relating student needs to occupational needs in the future. jeb

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